

GHOST IN THE SHELL
MAN-MACHINE INTERFACE

攻殻機動隊

ISSUE 7 OF 11

STORY AND ART BY

MASAMUNE SHIROW

TRANSLATION BY

FREDERIK L. SCHOOT AND TOREN SMITH

この物語に登場する
様々な設定や解説や概念
は全て妄想の産物で
あり、現実とは無関係
の娛樂物です。服用を
誤る事無くお楽しみ頂
ければ幸いです。
またデッヂ上げやギミ
ックの「誤用」による
二次被害には当方責任
を負いかねます点を御
了承願います。

LETTERING BY
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AND DAN JACKSON

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OPEN

MAN-MACHINE INTERFACE CONTROL PREFERENCES



WARNING: READ ME FIRST!

Readers may note that certain panels seem to have been inadvertently left unreversed or have incongruous backwards lettering. These were artistic decisions made by Mr. Shirow during the production of the mirror-imaged foreign edition of *Man-Machine Interface*. — Dark Horse Comics and Studio Proteus

The various situations, explanations, and concepts that appear in this book are a product of my wild imagination, a form of entertainment with no connection to reality. Take according to directions, and enjoy. Be advised that the author assumes no responsibility for any collateral damage resulting from improper use of the various constructs, fabrications, and gimmicks in the story.

APOLOGIES AND CORRECTIONS

In the *Ghost in the Shell* graphic novel published in 1991, the heroine, Motoko Kusanagi, fused with a self-described "intelligent life-form" and left Section 9 of the Public Security Bureau. This story takes place approximately four years and five months later. As a result, this story is quite different from what was originally called *Ghost in the Shell* and featured Public Security's Section 9 (the Special Assault Force). I thought of visually differentiating the new Japanese title from the old one by merely changing the last kanji character, from one that means "military unit" to the homophonic kanji for "body" or "form" (which would shift the meaning of "mobile force" or "riot squad" to something like "mobile-unit-body-entity"), but for a variety of reasons I decided not to do so. To those readers expecting a direct continuation of the prior storyline, I apologize and beg for your understanding. I'm sorry, folks!

— Masamune Shirow

Send comments to:

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interface@darkhorse.com

M O D D O F L I F E

05

MANMACHINE INTERFACE CONTROL PREFERENCES

ONLINE

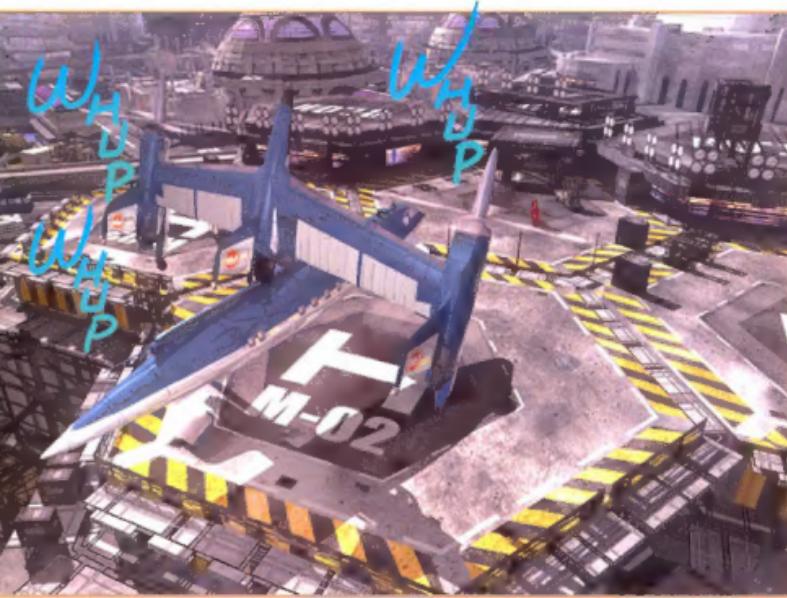
ONLINE



PERFECTIVE LEVELS

2035.03.06.PM01.54





DECATONCALE: Name of a special supercomputer in this story. Only three such systems exist on the planet.
ARACNOSAT: Name of an optical satellite network system. Uses redundant communications lines to ensure throughput.



OKAY... I
CHECKED WITH
MR. CASH
FLOW IS CLEAN,
NO SIGN OF
NEPOTISM OR
NOTHIN'.

THE DEPARTMENT
CHIEF AND FELLA IN
CHARGE SECRETLY
INVESTIGATED HER.
THE OLD EXAMINERS
OFFICE COLLECTED
ALL THE RELEVANT
DOCUMENTS...
NOTHIN' SPECIAL.

WELL, SHE MUST
HAVE SOME SORT
OF EXCEPTIONAL
CONNECTIONS,
REGARDLESS. I
WONDER WHAT
KIND OF WORK
SHE NORMALLY
DOES...?

AT ANY RATE, KEEP
GATHERING INFO ON
HER. THERE MAY BE
SOME DISPUTE GOING
ON ABOVE OUR
HEADS, SO I WANT
YOU TO REPORT TO ME
DIRECTLY, WITH AN
INDEPENDENT TEAM.

SHE'S STARTED
INPUTTING!
I CAN'T TELL
WHAT SHE'S SAYING
'CAUSE I CAN'T
CRACK THE FILES
WITH THE TOOLS
I'VE GOT.

AND SHE'S
CYCLING THROUGH
DIFFERENT RELAYS
AT AN INCREDIBLE
SPEED.

AT LEAST TRY
TO FIGURE OUT
OR GUESS--
WHO SHE'S
CONNECTING
TO.

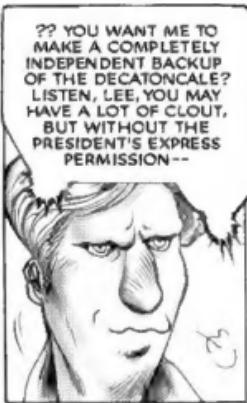
HABU! I NEED
TO KNOW HOW
MANY SENIOR
RESEARCHERS IN
CHARGE OF THE
DECATONCALE
ARE OFF-SITE
NOW.

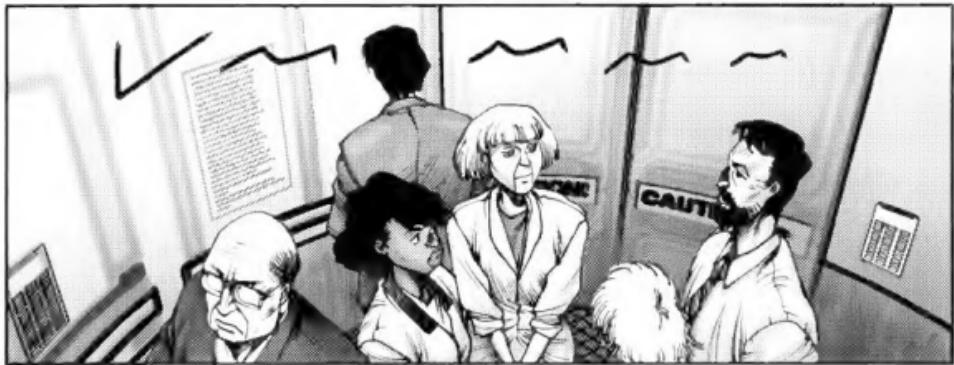
MNF? WELL, IT'S
LUNCHTIME NOW,
SO PROBABLY ABOUT
A THIRD. IF YOU
WAIT A SEC, I'LL
CHECK...

OKAY...
TWENTY-
EIGHT.
WHASSUP?

IT MAY BE A FEINT BY
E-THUGS SO DEPARTMENT
HEAD ARAMAKI CAN
CONNECT TO THE
DECATONCALE. MAKE
SURE TWO OUT OF THREE
OF THE DEDICATED
SECURITY TEAMS ARE
STAFFED WITH NON-E-
BRAIN PERSONNEL.

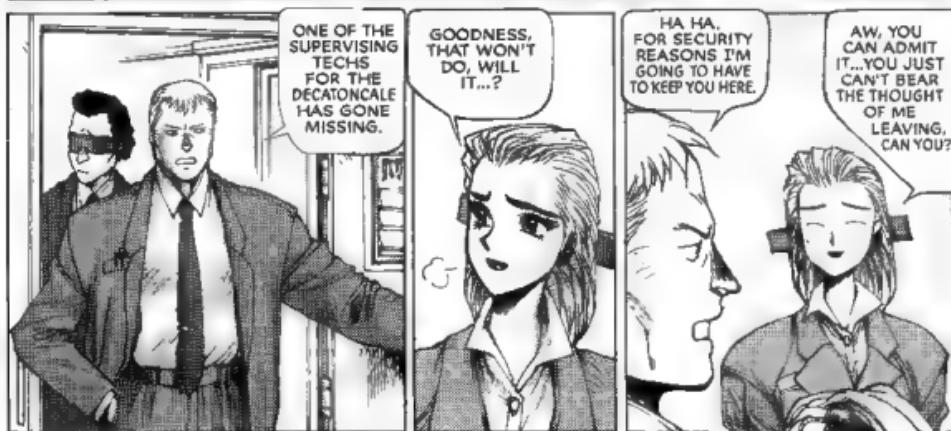
GOTCHA,
BOSS.











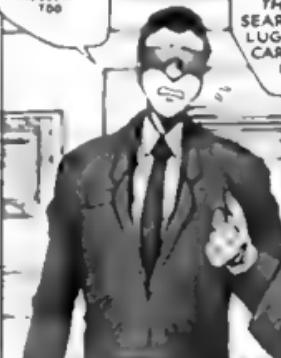
JEEZ BOSS! WAS THAT SUSPICIOUS OR WHAT?

AND INSOLENT TOO

DO A FULL CHECK OF HER PASS TO HOLD HER IN THE LOBBY! AND I WANT A THOROUGH SEARCH OF HER LUGGAGE, HER CAR, AND HER PLANE!

GET A SCENT-TRACKING CYBORG SNIFFING AROUND THAT ELEVATOR, TOO, BUT MIND YOUR MANNERS WITH HER!

BY THE WAY, DON'T LET THAT MICRO-MINI DISTRACT YOU. SHE'S USING EYE-POWERS, THAT'S ALL.

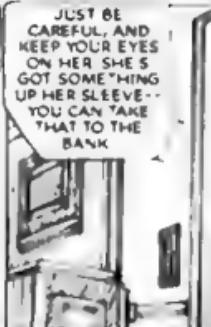


HEY DON T WORRY BOUT ME BOSS! I LIKE MY BABES TO HAVE A LITTLE CLASS, Y KNOW'

BESIDES SHE'S AETHINCIR



JUST BE CAREFUL, AND KEEP YOUR EYES ON HER. SHE'S GOT SOMETHING UP HER SLEEVE-- YOU CAN TAKE THAT TO THE BANK



COVER THE EXITS FIRST. WHEN THOSE CY-STYLE PROSTHETIC BODIES START MOVING, THEY'RE MIGHTY FAST EVEN AT NORMAL SPEED



BOSS! WE DISCOVERED A HORIZONTAL OPENING IN THE ELEVATOR ACCESS SHAFT!

WHAT DO YOU MEAN, "DISCOVERED"?

THERE MAY BE SOMETHING ON PAPER, BUT THE ELECTRONIC BLUEPRINTS SHOW NO RECORD OF THIS! AND SOMETHING'S CLEARLY GONE THROUGH HERE RECENTLY...



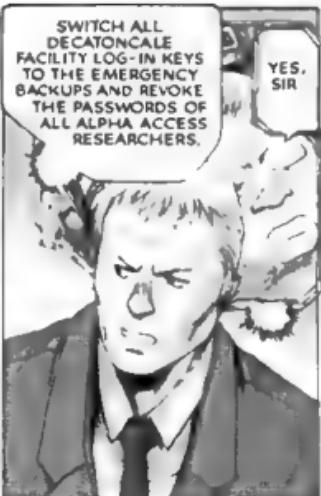
Eye-pull This isn't the name of a high tech device, but a technique such a magician might use. Sort of like a feint in martial arts. It requires using movements or elements that attract attention in a properly timed fashion, and help to direct attention and short term memory in a specific way. In this case maybe we could call it "sleight of leg."

PUT
TOGETHER A
DATASET AND
SEND IT TO
ME WHAT'S
THE NEWS
FROM THE
CEBOTS?

THEY
HAVEN'T
ALL
PHONED
IN YET

SWITCH ALL
DECATONCALE
FACILITY LOG-IN KEYS
TO THE EMERGENCY
BACKUPS AND REVOKE
THE PASSWORDS OF
ALL ALPHA ACCESS
RESEARCHERS.

YES,
SIR



JIM!
DEPLOY
THE ANTI
E-THUG
GROUP IN
THE
CENTRAL
SECTOR



SHALL I
TRY FOR A
WARRANT TO
INSPECT
HER PRIVATE
EFFECTS,
SIR?



GIVE IT A SHOT!
WE'RE FACING TOO
MANY VARIABLES
HERE. WE'VE GOT
TO TAKE AS MANY
DEFENSIVE
MEASURES AS
POSSIBLE FOR
NOW

UEE!



SIR!! THERE'S NOT A
SINGLE SPIDER LEFT
IN THE WAREHOUSE!
ALL RECORDS OF THEM AND
THEIR SUPPORT
EQUIPMENT
HAVE BEEN
LOST!

WHAT?! WE
GOT SOME
KINDA BLACK
HOLE IN THE
ORGANIZATION?
FIND 'EM!!



I've heard about the U.S. army's plans to use more fully equipped infantry and streamline and speed up their mobile armored forces (don't forget to reform the navy and the forces stationed in Japan while you're at it). Of course that's mainly for combat operations in different overseas environments, but as I mentioned before, Japan's military could use some major modernizing, too. The navy and the maritime safety agency, in particular, seem to be handicapped by too many concepts that date back to World War II, if you ask me. And you think the current army can really respond to a guerrilla action in an urban environment? That stated, I'd hate to see any swap made that involved the withdrawal of U.S. forces in Japan and a permanent stationing of atomic powered carriers in the East China Sea.

UH...MS ARAMAKI?
WE'D LIKE
YOU TO COME
WITH US TO
THE SECURITY
OFFICE...WE'RE,
UH, CHECKING
PASSES...

GOODNESS!
ON MY FIRST
DAY OF
VACATION?!



WANT ME TO
PERFORM A
PSYCHIC
DISCONNECT
BETWEEN THAT
FAT OILY PIG IN
THE ELEVATOR
EARLIER AND
HIS GUARDIAN
DEITY?

SURE, IF IT
MAKES YOU
FEEL GOOD...
BUT I WON'T
THANK YOU
FOR ANYTHING
I CAN'T VERIFY!

DON'T WORRY,
I WON'T ASK
FOR A REWARD!
IN FOREIGN
RELATIONS,
IT'S RESULTS
THAT COUNT,
YES?

YOU GOTTA
KEEP IT
SECRET,
THOUGH!

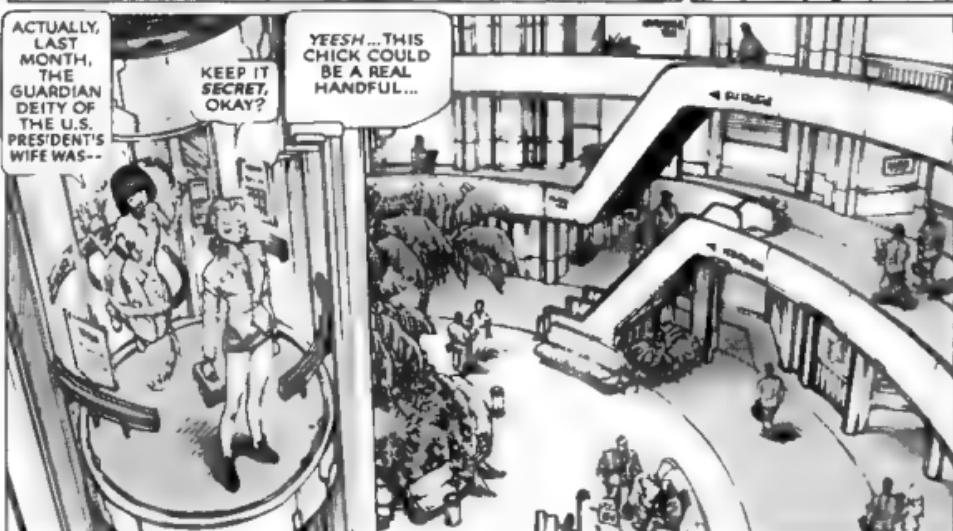
HEE
HEE!

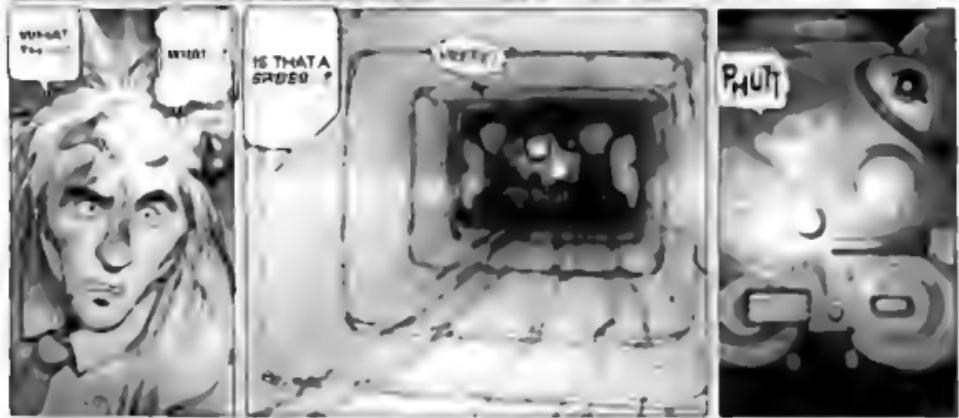


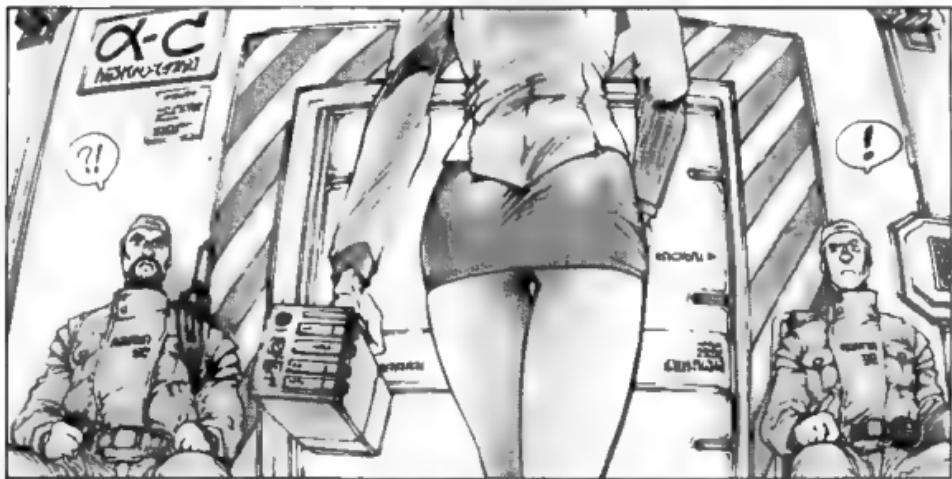
ACTUALLY,
LAST
MONTH,
THE
GUARDIAN
DEITY OF
THE U.S.
PRESIDENT'S
WIFE WAS--

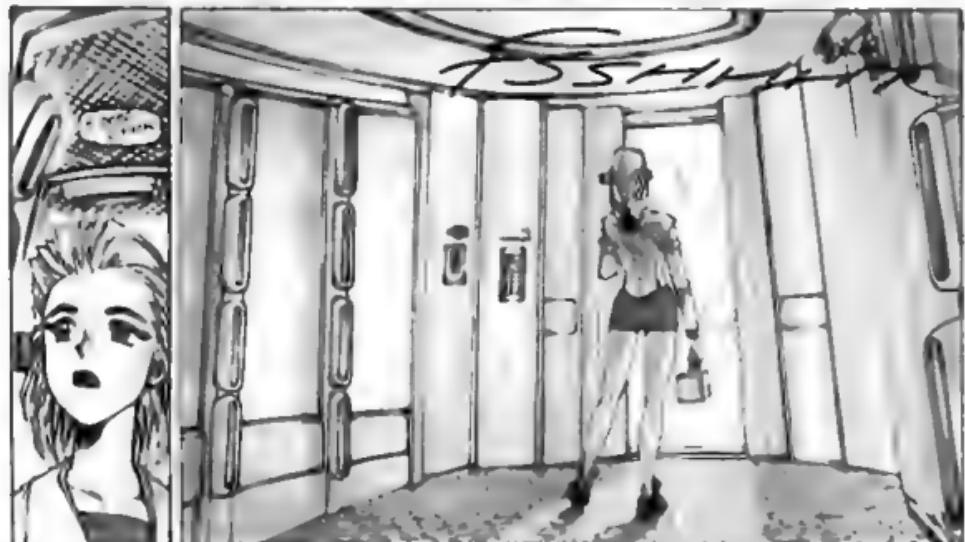
KEEP IT
SECRET,
OKAY?

YEESH...THIS
CHICK COULD
BE A REAL
HANDFUL...









DAMMIT, HABU! YOU WERE SUPPOSED TO SWITCH THE SYSTEM OVER TO THE EMERGENCY KEYS!

I DID! I SWEAR!

THAT ROOM DOESN'T USE A DIGITALLY ENCRYPTED KEY--IT'S HARDWARE AND NOT EXACTLY SOMETHING YOU CAN CRACK WITH A COUPLE OF PICKS!

SHE MUST'VE GOTTEN AN EMERGENCY KEY IN ADVANCE!!

SO THE ONLY REASON SHE SNATCHED THE SUPERVISING RESEARCHER WAS TO GET US TO CHANGE THE DAMN KEYS!!

HI, EVERYBODY!
SCUSE ME...

ZZ ZZZZ

WHAT'S WITH THESE PEOPLE? A GROUP NAP?
HOW UNPROFESSIONAL!

IT'S A SPECIAL GAS, PLUS A LATENT VIRUS...I GOT IT FROM THE WAREHOUSE IN WARD SEVEN. MY COMPANY'S PRODUCTS ARE DEFINITELY THE BEST.



LESSEE . THERE ARE ONLY TWELVE PLACES A HUMAN OR HUMAN-ASPECT PROSTHETIC BODY CAN GET THROUGH THE ACCESS SHAFTS LEADING INTO THE DECATONCALE... AND EIGHT OF THOSE ARE BEING BLOCKED BY SPIDERS.

IS SLEEPY JIM STILL BLOCKING ONE? IF HE IS, HAUL HIM OUT OF THERE!

PUT TOGETHER AN ARMORED ASSAULT TEAM FOR ME, AND SEND THEM OVER TO THE CENTRAL SECTOR

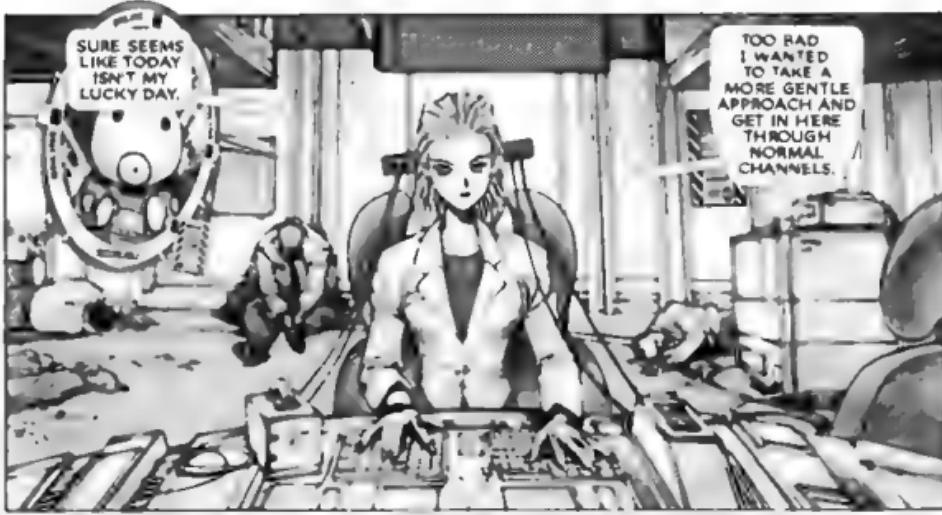
GOTCHA!

MISS! SECURITY HERE! I NEED TO CONTACT THE PRESIDENT, ON THE DOUBLE!

OH?

THE PRESIDENT'S OUT ON PERSONAL BUSINESS NOW. SIR AND I'M TERRIBLY SORRY, BUT IT'LL TAKE A WHILE TO CONTACT HIM

THIS IS
NOT
MY LUCKY
DAY...



† COMPANY LAN TERMINAL

† HARDENED BARRIER & SURROGATE RESET BOX

DECATONCALE TERMINAL †

WANT ME TO ACTIVATE THE BODY ARMOR VIRUS?

NOT 'TIL I TELL YOU.

WE'RE WORKING BACK FROM THE POINT WHERE THEY CALLED IN THE POLICE ATTACK FORCE... GOT THE SATELLITE SETTINGS?

DEPLOYING ALONG THREE AXES OF ROUTE ARRAYS... STANDING BY WITH ALL TYPES OF ATTACK BARRIERS!

THERE ARE 17 SATELLITES ABOVE HQ. HOW DO YOU WANT TO CONNECT THE COMPANY'S INTERNAL ROUTES TO THE DECATONCALE?

WE'LL DEPLOY WITH MAXIMUM ORDINARY THRESHOLD. SET A 0.5MS GAP FOR PURSUERS

I WANT A BACKUP WITH FULL FUNCTIONALITY! KEEP WATCH BUT FOR ANY COMPOUND VIRUSES!

GIVE TOP PRIORITY TO THE SYSTEM'S NEW AREA SETTINGS!

GOSH, I DON'T THINK
THIS AI'S GOT A
BUILT-IN GREETING
FUNCTION MA'AM.

GOOD
AFTERNOON,
DECATIONCALE.

INJECT THE
MOTOKO FILE
SYSTEM..
SET UP AN
ADVANCED COMBAT
CAPABILITY
WITH EIGHT
ARRAYS.

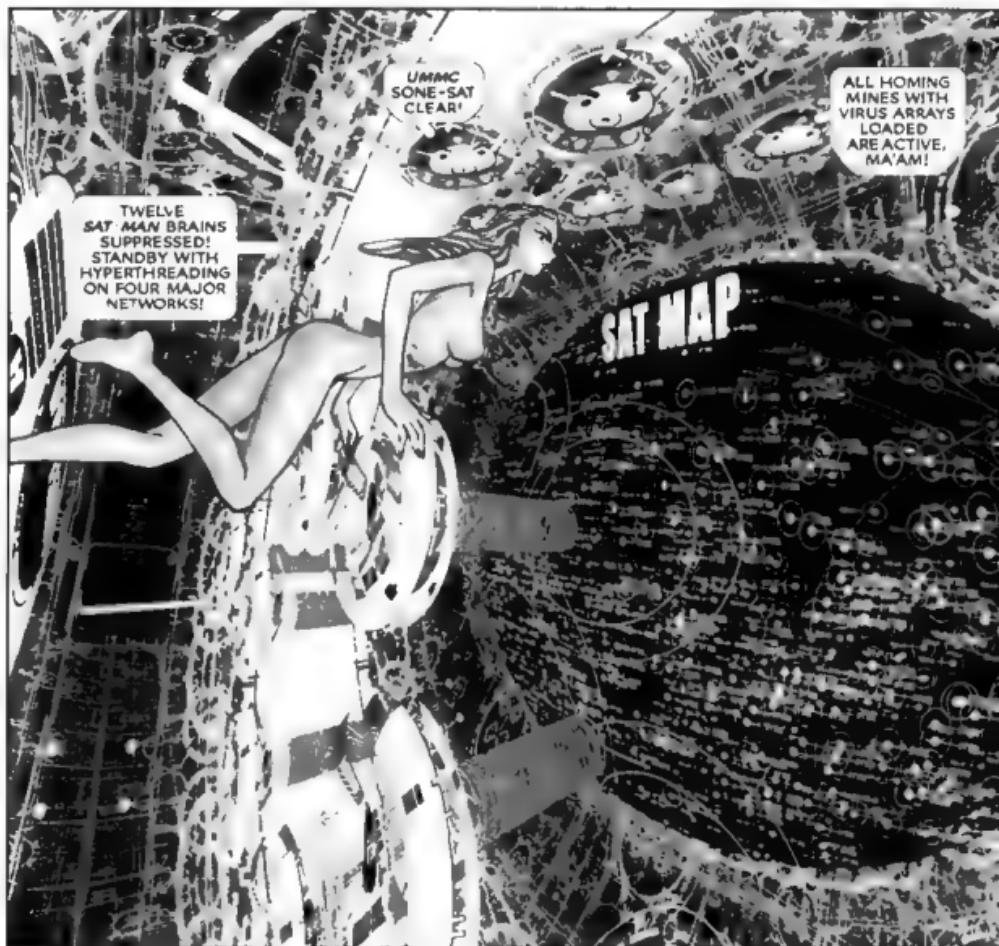
AS SOON AS
THEY BREAK
THROUGH, RUN
NEW VERSIONS
IN RANDOMIZED
SEQUENCE.
STAND BY!

FOR THE
DECOYS, SET
MAZES IN
TRIPPLICATE.
MAXIMIZE CPU
PROCESSING
LOAD.

ASSUME WE'RE
FACING MULTIPLE
ENEMIES AND
DISPERSE THE
SETS. SPLIT UP
INTO FOUR
GROUPS AND
ACTIVATE
THRESHOLD
TRIGGERS!

LINK TO
ALL KNOWN
SATELLITE
SYSTEMS!

CAUTION!
UNARMED



MOTOKO M2: Name of the other Motoko decoy, the one who has been stopped by security.



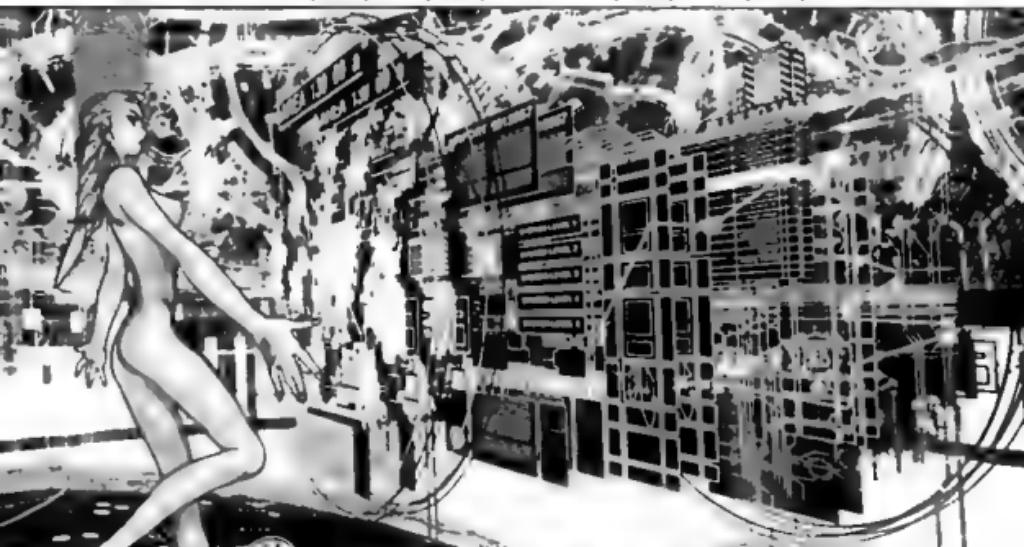


AREA MAP
(barrier)

AIRPORT MAIN SYSTEM
(barrier)

EMPLOYEE FILE
(barrier)

AIRPORT MAIN SYSTEM CORE
(barrier)



BARRIER 128
NOW
CLEARED!
BUILDING
ROUTE AND
EXECUTING
CONVERS ON

I'LL NEVER BE
ABLE TO QUIT
MY JOB AFTER
EXPERIENCING
THIS KIND OF
POWER

TARGET
ERYOPS

I CAN SEE
THE AIRSHIP
WE'RE
INTERESTED
IN AND
EVERYTHING
AROUND IT,
TOO...

ON PAPER, AT LEAST,
THE SHIP'S OWNED
BY A THAI COMPANY,
BUT ITS TRUE
AFFILIATION IS
UNCLEAR...

CONNECTIN
WITH THE
ENEMY
TERMINALS
NOW!

TC508 ERYOPS



THIS IS
AREA 199
CONTROL 09
COME IN
TC508'

WE HAVE A RANK
THREE ENEMY
AN ADVANCED
DEFENSE SYSTEM
IS IN. WHAT'S
APPARENTLY A
HUMAN BRAIN
485 MINES
CLEARED, ARRAY
56 HIT.

THIS IS
TC508
HOW CAN
I HELP
YOU?

WHAT'S
CONTROL
WANT?

HEM. LISTEN
TO THIS. FEEL TO...

HEY! THESE GUYS
ARE JACKED FULL
OF DRUGS! TOO
DANGEROUS TO DO
A FULL SENSORY
INJECTION...THAT
LEVEL OF BRAIN AUTO-
PILOTING MEANS
THEY'RE ALMOST
A MAN.

WHERE
IS THE
BIGGEST
BABY?
THIS...



THE DRUG'S AN ACTH
SUPPRESSANT CALLED LCH250R.
I CAN'T TELL HOW MUCH IS
USED, THOUGH... APPLYING
VARIABLE CORRECTION BIAS
TO YOUR LINK.
HANG IN THERE.

HMM...AS
EXPECTED,
THEY PUT A
LOT OF
MONEY
INTO THIS
FACILITY.

CURRENTLY
ESTIMATING SITE
LOCATION...
CANDIDATE AREA
IS SHRINKING...



TO BE CONTINUED...

INTERFACE

Send email comments to interface@darkhorse.com

Send snail mail comments to:

interface
c/o Dark Horse Comics
10956 SE Main St.
Milwaukie OR 97222

Interface,

You simply can't underestimate Shirow's influence. It's now found its way even into Future Studies.

There is an article at www.betterhumans.com called "Exploring the Posthuman through Science Fiction Stories" about humanity's future that helps us imagine where our dance with technology will lead.

If we think of human sentience as white light, and the prism as technology, then the obvious question to pose is what might shine out from that prism when we shine our brilliance through it? What possibilities might the future of intelligent life hold?

This is heady territory, misty, murky and unclear. Right? Not necessarily. There are markers ahead, looming from this fog as guideposts for us to the possibilities.

When we address one of those large issues such as the possible effects of technology on human evolution, much of the mental work on this question has already been accomplished by several generations of science-fiction writers over the past hundred-plus years. A survey and collation of their ideas reveals no less than twenty-one possibilities to date – twenty-one ways of being which humanity might evolve towards, or which might evolve alongside us.

Out of the positioning of the twenty-one markers, three distinct pathways emerge: The Path of the Genes, the Path of the Machine, and the Path of the Merging.

Shirow's work on the D.I., the Decot, and the Nested Human account for three of the twenty-one markers. And that's not mentioning that Kusanagi is an excellent example from one of the other categories, the Cyborg.

If his work is starting to be taken seriously as possible evolutionary futures for humanity, then that speaks to the power and clarity of his vision. One can only wonder what he might come up with next, which very well could be the daily reality in a hundred years.

Glenn Hough, M.S. – Studies of the Future

*Glenn, you've certainly raised the bar for letters of comment! While I must confess a soft spot in my heart for those thought-provoking missives that put forth the proposition "Westernizing sux!" or ask the timeless, burning question "Where's the orgy scene?!?!", I must say that your email is just about the most interesting analysis of Shirow's work I've seen so far. I have absolutely no idea what you're talking about, of course, but that's my cross to bear, not yours. Seriously, though, Shirow is as wired-in as any current storyteller to the possibilities of technology and the inevitable breakdown of what defines human and machine. I think what impresses me most is the almost matter-of-fact nature with which Shirow handles the subject, as if he were writing for a future, rather than contemporary, audience. My guess is that I'll re-read *MMI* in twenty years and finally get it!*

And, by the way, you wrote that article on [betterhumans.com](http://www.betterhumans.com)! Crafty, these Future Studies types. Now that you're exposed to the light, let's have a round of applause for a well-written, interesting piece. Everyone, go read it right now...then explain it to me.

I just finished reading issue #5 of *Ghost in the Shell 2*. It's probably a bit late in coming, but, in answer to Mr. Shirow's questions on page 15 (??? the pages aren't numbered so it's hard to tell...it's the page just to

the left of the center staple.), yes, it is possible to run a network over ordinary electrical wiring, it works reliably, and it is safe. However, for a variety of reasons, it's not likely to ever be popular. Home networking of the future is more likely to be done using WAP or some other wireless protocol.

Having answered his questions, however, I now have a couple of my own.

First, my local comics store managed to obtain a copy of the deluxe edition of issue #1 but can't seem to find deluxe editions for any other issue. Do/will deluxe editions for the rest of the series exist? If so, how can I get them?

Also, I noticed that, starting this issue, *GitS2* suddenly went from full color to B&W. While the story also works well in this format, I can't help but wonder why things changed suddenly like that. Is anyone allowed to talk about the reasons behind the sudden change?

It's a great series so far. Keep up the good work. :)

Siece

There was indeed only one deluxe edition of MMI, for the first issue. Actually, the limited edition came about pretty much by divine accident. One of our printers was doing a holofoil job for another client, with a run of about 2500 copies, but there was some extra room on the sheet, and would we be interested in getting in on the job? We thought it would be fun and look cool – and did it ever!

As to why the book shifts from color to black and white, there are a couple of reasons. Most manga are originally serialized in primarily black-and-white anthologies that have a few color sections, mostly for advertising, but some features will get the chance to have a chunk of the color section, and color art is produced accordingly. This was the case for the Young Magazine serialization of Man-Machine Interface, but Mr. Shirow added over a hundred pages of new color story pages after MMI had originally concluded its run. Most of the material you've seen in the first five Dark Horse issues was created after the initial serialization, which was primarily created in black and white. The series still has some of the original color sections from Young, and so the series begins in glorious color, bounces back and forth between amazing black and white and more glorious color for awhile, and then roars down the home stretch in even more glorious color. This is all probably far more than you ever wanted to know, but you asked!

Dear Interface,

Greetings from the Philippines! Yup, there are many fans of *GitS* here! Just finished reading issue #2 of *Man-Machine Interface*. The story is very different from its early version, but I liked it very much. The art is now better and the girls of MMI are sexier than ever! I love that all of its pages are in full color. Surely, fans like me won't complain on the changes made by Mr. Shirow.

The story is really great! And the concept of Motoko having different bodies (agents) is a great idea! Now we can see the different faces of Motoko! I can't wait for the other issues. When will you release the graphic novel version?

Well, one more thing, about the "Remotely Controlled Humanoid Terminal," regarding Mr. Shirow's note about whether Clarice needed to wear underwear. Well, in my opinion, whether cyborg, Controlled Humanoid Terminal, or whatever you call it, they should wear underwear! In order for other humans to accept cyborgs as "human," they must follow human ethics and morals (like wearing underwear).

John Jasper Guce

You've obviously given this underwear issue some thought, John! Frankly, I'll be satisfied if more humans start wearing underwear! As for the Man-Machine Interface collection, plan to see it in spring of 2004. And I think it's fairly safe to say that, ethically, graphic novels are not required to wear underwear!

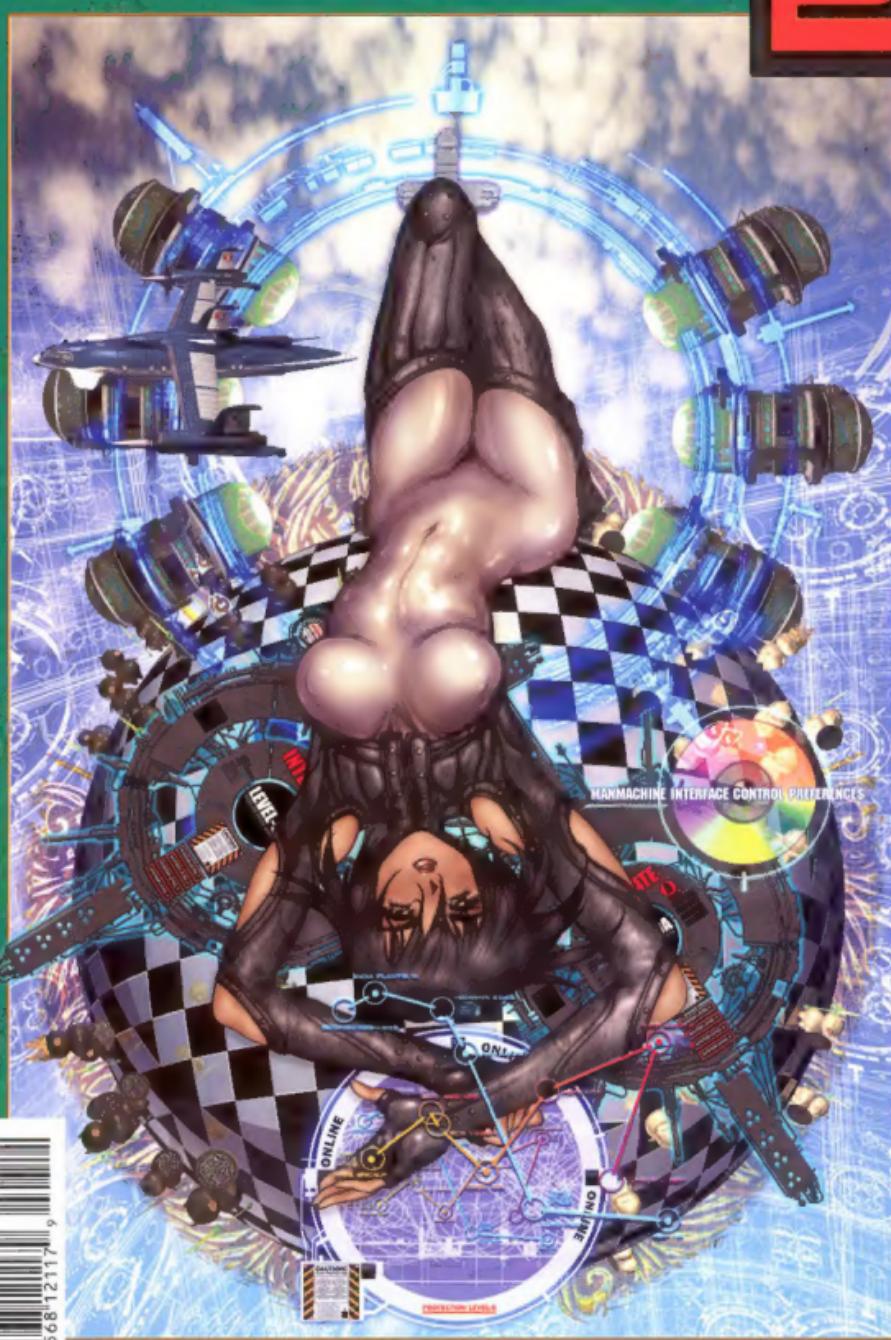
GHOST IN THE SHELL

MAN-MACHINE INTERFACE

2

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MASAMUNE SHIROW

TFT

The Furry Triangles



We Love Beavers.